# **Iowa Department of Natural Resources Title V Operating Permit**

Name of Permitted Facility: IPL - Lansing Generation Station Facility Location: 2320 Power Plant Drive, Lansing, IA 52151

Air Quality Operating Permit Number: 98-TV-016R2

**Expiration Date: August 19, 2023** 

Permit Renewal Application Deadline: February 19, 2023

**EIQ Number: 92-2686** 

Facility File Number: 03-03-001

#### **Responsible Official**

Mr. Matthew Cole **Director, Customer Operation North Region Alliant Energy** 2320 Power Plant Drive, Lansing, Iowa 52151 (563) 538-3130

#### **Permit Contact Person for the Facility**

Mr. Cory Carter **Senior Environmental Specialist Alliant Energy** 2320 Power Plant Drive, Lansing, Iowa 52151 (563) 538-3147 (corycarter@alliantenergy.com)

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued

subject to the terms and conditions contained in this permit.

#### For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section	Date	

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	actual cubic feet per minute		
	Code of Federal Regulations		
	emissions inventory questionnaire		
	degrees Fahrenheit		
-	grains per dry standard cubic foot		
	horsepower		
IAC	Iowa Administrative Code		
IDNR	Iowa Department of Natural Resources		
lb./hr	pounds per hour		
lb./MMBtu	pounds per million British thermal units		
MMBtu/hr	million British thermal units per hour		
MVAC	motor vehicle air conditioner		
NSPS	new source performance standards		
ppmv	parts per million by volume		
scfm	standard cubic feet per minute		
SIC	Standard Industrial Classification		
	A Transformer-Rectifier set in an electrostatic precipitator		
	United States Environmental Protection Agency		
<b>Pollutants</b>			
PM	particulate matter		
$PM_{10}$	particulate matter ten microns or less in diameter		
$SO_2$	sulfur dioxide		
NO <sub>x</sub>	nitrogen oxides		
VOC	volatile organic compound		
CO	carbon monoxide		
CO <sub>2</sub>	carbon dioxide		
	hazardous air pollutants		

# I. Facility Description and Equipment List

Facility Name: IPL - Lansing Generating Station

Permit Number: 98-TV-016R2

Facility Description: Electric Services (SIC 4911)

## **Equipment List**

Emission	Associated		DNR
Point	Emission Unit	Associated Emission Unit Description	Construction
Number	Number	Permit	
BST4	LB4	Boiler #4	75-A-014-P12
	LASH2	Unit #4 Ash Storage Truck Silo	
ASH2C	LASH2A	Unit #4 Ash Storage Silo	95-A-846-S2
	LASH2B	Unit #4 Ash Storage Rail Silo	
305	305	Hydrated Lime Silo	13-A-228-S1
ACS1	ACS1	Activated Carbon Silo	09-A-191
LASH4A	LASH4A	Ash Silo #4 (Silo Filling)	09-A-190-S2
LASH4A-F	LASH4A-F	Ash Silo #4 Load Out (Pug Mill)	16-A-315
LASH4B	LASH4B	Ash Silo #4 (Telescoping Truck Filling Exhaust)	09-A-334
LASH4C	LASH4C	Ash Silo #4 (Silo Vent)	09-A-335
BST5	LB5	Heating Boiler	11-A-684-S2
ASH2	LASH2	Ash Truck Silo Unloader	NA
ASH2B	LASH2B	Ash Rail Silo Unloader	NA
ASH3	LASH3	Ash Pile	NA
DC1A	LDC1	Dust Control System on Coal Handling	75-A-190-S2
DC2	LDC2	Coal Bunker Room #4, Bunker Dust Collector	75-A-192-S4
LEG1	LEG1	Emergency Generator (311 HP)	NA
CP1	LCP1	Coal Pile	NA
CP2	LCP2	Coal Pile	NA
CP3	LCP3	Coal Unloading	NA
CP4	LCP4	Coal Stockpiling	NA
CP5	LCP5	Coal Conveying	NA
CP6	LCP6	Coal Bulldozing	NA

Note: Equipment enclosed in double borders is grouped in a table in the Emission Point-Specific Conditions section of the permit.

## Insignificant Equipment List

Insignificant Emission Unit	Insignificant Emission Unit Description
Number	•
LGLY	Ethylene Glycol Storage Tank (5,000 gallons)
LTF	Tractor Fuel Oil Tank (1,047 gallons)
LFOV	#2 Fuel Oil Tank (110,000 gallons)
LBFPOV4	Unit 4 Turbine-Driven Boiler Feed Pump Oil Reservoir (1,400 gallons)
LTO4	Unit 4 Motor Driven Boiler Feed Pump Oil Reservoir (50 gallons)
LGO4	Unit 4 Turbine Oil Reservoir (5,000 gallons)
LTOS4	Unit 4 Turbine Oil Storage (7,000 gallons)
LCF5	Unit 4 Morpholine Nalco 352 Tank (226 gallons)
LCF6	Unit 4 TriPO4 Tank (177 gallons)
L-33	Gasoline Storage Tank (300 Gallons)

## **II. Plant-Wide Conditions**

Facility Name: IPL - Lansing Generating Station

Permit Number: 98-TV-016R2

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

#### **Permit Duration**

The term of this permit is: 5 years Commencing on: 8/20/2018

Ending on: 8/19/2023

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

#### **Emission Limits**

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

<u>Sulfur Dioxide (SO<sub>2</sub>):</u> 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

#### Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

<u>Fugitive Dust:</u> Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to

be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

- 1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- 2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
- 3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
- 4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
- 5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
- 6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

#### 40 CFR 60, Subpart D Requirements

This facility is subject to Standards of Performance for Fossil-Fuel-Fired Steam Generators for which construction is commenced after August 17, 1971 – 40 CFR 60, Subpart D and the affected unit is LB4 (BST4: Boiler #4). Applicable subpart D requirements are incorporated into the Emission-Point Specific Conditions Section.

Authority for Requirement: 567 IAC 23.1(2)"a" (DNR Construction Permit 75-A-014-P12)

40 CFR 60, Subpart D

#### 40 CFR 63, Subpart DDDDD Requirements

Heating Boiler, LB5 is subject to the National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters – 40 CFR 63, Subpart DDDDD.

Authority for Requirement: 567 IAC 23.1(4)"dd", 40 CFR 63, Subpart DDDDD

## 40 CFR 63, Subpart ZZZZ Requirements

This facility is subject to subpart ZZZZ and the affected unit is EP-LEG1 (311 Bhp emergency generator with a diesel engine).

Authority for Requirement: 567 IAC 23.1(4)"cz", 40 CFR 63, Subpart ZZZZ.

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## **III. Emission Point-Specific Conditions**

Facility Name: IPL - Lansing Generating Station

Permit Number: 98-TV-016R2

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#### **Emission Point ID Number: BST4**

#### Associated Equipment

Associated Emission Unit ID: LB4

Emissions Control Equipment ID Number: BAG#4

Emissions Control Equipment Description: Low NOx Burners (CE LOW NOX BURNERS)

Electrostatic Precipitator (CE ESP4) Activated Carbon Injection (CE ACI) Selective Catalytic Reduction (CE SCR)

Flue Gas Desulfurization

(CE CIRCULATING BED DRY SCRUBBER)

Baghouse (CE BAG4)

Continuous Emissions Monitors ID Numbers: CS4SO2, CS4CO2, CS4OPAC, CS4NOx, and

CS4FLOW

Emission Unit vented through this Emission Point: LB4

Emission Unit Description: Boiler #4

Raw Material/Fuel: Subbituminous Coal, #2 Oil

Rated Capacity: 2,603 MMBtu/hr

## **Applicable Requirements**

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

#### **Best Available Control Technology (BACT) Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	tons/yr (1)	Additional Limits
Carbon Monoxide (CO)	2850	0.25 lb/MMBTU
Sulfuric Acid Mist (SAM, H <sub>2</sub> SO <sub>4</sub> )	62.7	0.0055 lb/MMBTU

Standard is a 12-month rolling total. The standard includes all periods of operation including periods of startup, shutdown, and malfunction (SSM).

#### **Consent Decree Emission Limits** (1)

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits were established by the Consent Decree [*United States of America and The State of Iowa, and The County of Linn, Iowa and Sierra Club v. Interstate Power and Light Company*, Civil Action No.: C15-0061; United States District Court for the Northern District of Iowa (September 2, 2015)] and shall not be exceeded:

Pollutant	24-hr Rolling Average	30-day Rolling Average	
Particulate Matter (PM) – Federal	0.015 lb/MMBTU <sup>(2)</sup>	NA	
Sulfur Dioxide (SO <sub>2</sub> )	NA	0.075 lb/MMBTU	
Nitrogen Oxides (NO <sub>x</sub> )	NA	0.080 lb/MMBTU	

Compliance with the emission limits listed in Consent Decree Emission Limits table shall be demonstrated through the use of Continuous Emission Monitoring Systems (CEMS). Please see Conditions 6 and 14 of DNR Construction Permit 75-A-014-P12 for the monitoring procedures to be used for each individual pollutant.

#### **New Source Performance Standards (NSPS) Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	Emission Standard (1)	Reference/Basis
Particulate Matter (PM) – Federal	0.10 lb/ MMBTU <sup>(2)</sup>	567 IAC 23.1(2)"a"
Opacity	32% (3)	567 IAC 23.1(2)"a"
Nitrogen Oxides (NO <sub>x</sub> )	0.70 lb/MMBTU <sup>(4)</sup>	567 IAC 23.1(2)"a"
Sulfur Dioxide (SO <sub>2</sub> )	1.2 lb/MMBTU <sup>(5)</sup>	567 IAC 23.1(2)"a"

<sup>(1)</sup> Standard is expressed as the average of three (3) stack test runs

<sup>(2)</sup> As required by Consent Decree Paragraph 143, the owner or operator may operate Boiler #4 (EU LB4) to achieve a filterable PM emission rate of no greater than 0.030 lb/MMBTU during periods of level 3 (high range) correlation testing under PS-11, Section 8.6(4) provided that such correlation testing is conducted in accordance with the procedures approved by EPA as part of the correlation plan required by the Consent Decree.

<sup>(2)</sup> As specified in 40 CFR Part 60, Subpart D §60.42(a)(1). (Front-half Particulate)

<sup>(3)</sup> As specified in 40 CFR Part 60, Subpart D §60.42(b)(2), Boiler #4 shall not cause to be discharged into the atmosphere any gases which exhibit greater than 32 percent opacity, except that a maximum of 39 percent opacity shall be permitted for not more than six minutes in any hour.

<sup>(4)</sup> As specified in 40 CFR Part 60, Subpart D §60.44(a)(3). The limit is based on the arithmetic average of three contiguous one-hour periods as measured by a continuous monitoring system, as specified in 40 CFR Part 60, Subpart D §60.45(g)(3).

<sup>(5)</sup> As specified in 40 CFR Part 60, Subpart D §60.43(a)(2). The limit is based on the arithmetic average of three contiguous one-hour periods as measured by a continuous monitoring system, as specified in 40 CFR Part 60, Subpart D §60.45(g)(2).

#### **Other Emission Limits**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr	tons/yr	Other Limits	Reference/Basis	
Particulate Matter (PM) – Federal	NA	NA	0.03 lb/MMBtu		
Particulate Matter (PM) – State	NA	592.7	NA		
$PM_{10}$	260	519.6	NA		
Sulfur Dioxide (SO <sub>2</sub> )	3,127	6078.7	NA	DNR Construction Permit	
Volatile Organic Compounds (VOC)	NA	71.7	NA	75-A-014-P12	
Lead (Pb)	NA	0.5105	NA		
Nitrogen Oxides (NO <sub>x</sub> )	NA	4303.2	NA		

#### **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

#### **Federal Standards**

#### A. New Source Performance Standards (NSPS):

The following subparts apply to Boiler #4 (EU LB4):

Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	NA	23.1(2)	§60.1 – §60.19
D	Standards of Performance for Fossil-Fuel- fired Steam Generators for Which Construction Is Commenced After August 17, 1971	Solid fossil fuel	23.1(2)"a"	§60.40 – §60.46

#### B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is subject to the following federal regulation: *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units* [40 CFR Part 63, Subpart UUUUU].

#### C. Acid Rain:

The facility (plant number 03-03-001) is considered an affected source under 40 CFR 72, 73, 75, 76, 77, and 78 definitions as emission units at this source are subject to the acid rain emission reduction requirements or the acid rain emission limitations, as adopted by the Department by reference (See 567 IAC 22.120 – 567 IAC 22.148). This emission unit is subject to the  $SO_2$  allowance allocation,  $NO_x$  emission limitations, and monitoring provisions of the federal acid rain program.

Authority for Requirement: DNR Construction Permit 75-A-014-P12

### 40 CFR 60, Subpart D 40 CFR 63, Subpart UUUUU

#### Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept onsite for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Boiler #4 (EU LB4) shall be limited to combusting the following fuels:
  - Sub-bituminous Coal

- #2 distillate oil
- B. As required by Consent Decree Paragraph 91, the owner or operator shall "continuously operate" the SCR (CE SCR). Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the SCR (CE SCR) shall be operated at all times when Boiler #4 (EU LB4) is in operation consistent with the technological limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)]. Upon termination of the Consent Decree, the owner or operator shall submit a report in coordination with its Title V reporting schedule that includes the following information regarding the SCR (CE SCR):
  - (1) An identification of all periods when the SCR (CE SCR) was not operating,
  - (2) The reason(s) for the SCR (CE SCR) not operating, and
  - (3) The basis for the owner or operator's compliance or non-compliance with the continuous operation requirements.
- C. As required by Consent Decree Paragraph 118, commencing on December 31, 2016, and continuing thereafter, the owner or operator shall "continuously operate" the FGD. Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the FGD shall be operated at all times when Boiler #4 (EU LB4) is in operation consistent with the technological limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)]. Upon termination of the Consent Decree, the owner or operator shall submit a report in coordination with its Title V reporting schedule that includes the following information regarding the FGD (CE CIRCULATING BED DRY SCRUBBER):
  - (1) An identification of all periods when the FGD (CE 1B) was not operating,
  - (2) The reason(s) for the FGD (CE 1B) not operating, and
  - (3) The basis for the owner or operator's compliance or non-compliance with the continuous operation requirements.
- D. As required by Consent Decree 142, commencing on December 31, 2016, the owner or operator shall "continuously operate" the Baghouse (CE BAG4). Per Paragraph 15 of the Consent Decree, the term "continuously operate" means the Baghouse shall be operated at all times when Boiler #4 (EU LB4) is in operation consistent with the technological

limitations, manufacturer's specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions [as defined in 40 CFR §60.11(d)]. Upon termination of the Consent Decree, the owner or operator shall submit a report in coordination with its Title V reporting schedule that includes the following information regarding the Baghouse (CE BAG4):

- (1) All information necessary to determine compliance during the reporting period with:
  - (a) The obligation to optimize PM emissions controls.
- (2) A log detailing:
  - (a) An identification of all periods when the Baghouse (CE BAG4) was not operating,
  - (b) The reason(s) for the Baghouse (CE BAG4) not operating, and
  - (c) The basis for the owner or operator's compliance or non-compliance with the continuous operation requirements.
- E. The pressure drop across the boiler baghouse (CE BAG4) shall be maintained between 4.0 inches H<sub>2</sub>O 15.0 inches H<sub>2</sub>O (1-hr block average) during normal operating conditions (i.e. excluding periods of SSM). The owner or operator shall:
  - (1) Install, calibrate, operate, and maintain equipment to continuously monitor the pressure drop across the Boiler #1 Baghouse (CE BAG4).
  - (2) Record the 1-hr block average pressure drop readings from the monitoring equipment.
  - (3) Report deviations of the pressure drop range to the Compliance Section of the Department only if the excursions outside of the range exceed 5% of the operating hours during a semi-annual reporting period (January 1 June 30 or July 1 December 31) or if excursions outside of the range last for more than eight (8) consecutive hours.
- F. The minimum ammonia injection into the SCR (CE SCR) shall be 50 lb/hr of 19% aqueous ammonia solution based on an hourly average when the outlet temperature of the SCR (CE SCR) is above 575 °F (i.e. excluding periods of SSM). The owner or operator shall:
  - (1) Properly operate and maintain equipment to monitor the outlet temperature and the ammonia injection into the SCR (CE SCR). The monitoring device(s) and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
  - (2) Collect and record the ammonia injection rate into the SCR (CE SCR) on an hourly basis when the emission unit is operating, except for normal maintenance, calibration and replacement, and malfunctions of the meter.
  - (3) Collect and record the outlet temperature of the SCR (CE SCR) when the emission unit is operating. If the outlet temperature drops below 575 °F, the owner or operator shall note the reason the temperature dropped below 575 °F.
- G. Continuous operation of the Circulating Dry Scrubber (CDS) shall be verified once per day via a visual inspection of a viewing port at the air slide inlets to the CDS located at the outlet of the Distribution Bins. These are the air slides located closest to the CDS vessel. A visual inspection shall be performed to confirm the flow of scrubber byproduct

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into the CDS vessel during normal operation of Boiler #4 (EU LB4), except for periods of SSM and maintenance recommended by the CDS (CE CIRCULATING BED DRY SCRUBBER) manufacturer. The owner or operator shall:

- (1) Record once per day the visual inspection when Boiler #4 (EU LB4) is operating, except for periods of malfunctions.
- H. The owner or operator shall maintain a log of all maintenance and inspection activities performed on Boiler #4 (EU LB4) and all control equipment (except ESP4) listed on the cover page of this permit. This log shall include, but is not necessarily limited to:
  - (1) The date and time any inspection and/or maintenance was performed on any of the emission units and/or control equipment listed in Condition 3 of this permit;
  - (2) Any issues identified during the inspection and the date each issue was resolved;
  - (3) Any issues addressed during the maintenance activities and the date each issue was resolved:
  - (4) Identification of the staff member performing the maintenance or inspection.
- I. To maintain Project 13-063 as a minor project for Prevention of Significant Deterioration (PSD), the owner or operator shall have the following requirements after the physical modifications permitted by this project:
  - (1) Project 13-063 includes the addition of a dry scrubber acid gas control system to Boiler #4 along with the installation of ancillary equipment necessary to produce and handle hydrated lime used in this system. These are the only physical changes associated with this project.
  - (2) A report to the department shall be submitted within 60 days after the end of the each year setting out the unit's annual emissions during the calendar year that preceded submission of the report pursuant to 567 IAC 33.3 (18)"f (6). This report is required for the 5 years following the date of start of operation of this project.
- J. The owner or operator shall meet all applicable recordkeeping and reporting requirements under NSPS Subparts A and D.
- K. The owner or operator shall submit quarterly reports on opacity, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, CO and airflow to the Administrator and IDNR. For those items only required to be submitted to the Administrator regarding the Acid Rain requirements, the IDNR does not require a duplicate copy to be submitted. These reports shall conform to the requirements of 40 CFR Part 75.
- L. The owner or operator is not required to operate the Electrostatic Precipitator (ESP4) as long as the owner or operator is able to demonstrate compliance with the emission limits listed in Condition 1 of DNR Construction Permit 75-A-014-P12 without the ESP in operation.
- M. The owner/operator shall use a moisture content of 1% in PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions calculations for transfer of DFGD byproduct from the storage silo to the haul truck and from the haul truck to the storage pile. These calculations will be included in emission

- calculations required under Conditions 5.N and 5.O of DNR Construction Permit 75-A-014-P12.
- N. For the purposes of maintaining Project 09-405 as a minor project for Prevention of Significant Deterioration (PSD), the owner or operator shall calculate and record the monthly emissions and 12-month rolling totals for all criteria pollutants. The stack tests performed after the modifications shall be used to calculate PM and PM<sub>10</sub> emissions.
- O. Per 567 IAC 33.3(18)"f"(4), for the purposes of maintaining Project 13-063 as a minor project for Prevention of Significant Deterioration (PSD), the owner or operator shall have the following monitoring conditions for a period five (5) years from the date of start of operation (start-up date) of Boiler #4 after the physical modifications:
  - (1) Record the date Boiler #4 starts operation after the physical modifications.
  - (2) Record annually the sum of the actual PM, PM10, and PM<sub>2.5</sub> emissions from Boiler #4 in tons per year on a calendar-year basis.
  - (3) For all equipment or operations that were affected by project 13-063, record annually the ton per year value of the actual emissions minus the baseline actual emissions for PM, PM10, PM<sub>2.5</sub>. The equipment affected by project 13-063 shall include but may not be limited to Boiler #4, all associated fly ash and scrubber by-product handing equipment and activities including plant haul roads used to move the material to the storage piles.
- P. When calculating the annual PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from the facility as required in Condition O.(3) above, the following specific conditions shall apply to these specific operations:
  - (1) Unpaved Haul Roads:
    - (a) Emissions of particulate matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>) shall be calculated monthly per AP-42 Section 13.2.2, where the surface material silt content (s) is 19.51%.
  - (2) Paved Haul Roads:
    - (a) Emissions of particulate matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>) shall be calculated monthly per AP-42 Section 13.2.1 where the road surface silt loading (sL) is  $3.51 \text{ g/m}^2$ .
- Q. As required by Consent Decree Paragraphs 137 and 138, the owner or operator shall:
  - (1) Continuously operate each PM control device to maximize emission reductions at all times when the unit is in operation. Notwithstanding the foregoing sentence, the owner or operator is not required to continuously operate an electrostatic precipitator (ESP) on any unit if a baghouse is installed and operating to replace the PM control device function of the ESP on that unit.
  - (2) Except as required during correlation testing under 40 CFR Part 60, Appendix B, PS11 and QA/QC requirements under Appendix F, Procedure 2, the owner or operator shall, at a minimum, ensure that to the extent reasonably practicable:
    - (a) Where the control device is an ESP, each section of each ESP is fully energized, and where the control device is a baghouse, each compartment, except for any compartment specifically designated and designed as a spare compartment, of each baghouse is operational;

- (b) Any failed ESP section or baghouse compartment is repaired at the next planned outage (or unplanned outage of sufficient length);
- (c) Where applicable, the automatic control systems on each ESP are operated to maximize PM collection efficiency;
- (d) Each opening in the casings, ductwork, and expansion joints for each ESP and each baghouse is inspected and repaired during the next planned unit outage (or unplanned outage of sufficient length) to minimize air leakage;
- (e) Where applicable, the power levels delivered to each ESP are maintained consistent with manufacturer's specifications, the operational design of the unit and good engineering practices;
- (f) Where applicable, the plate-cleaning and discharge-electrode-cleaning systems for each ESP are optimized by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event; and
- (g) For each unit with one (1) or more baghouses, a bag leak detection program is developed and implemented to ensure that leaking bags are promptly replaced.
- R. Upon termination of the Consent Decree, the owner or operator shall submit periodic reports as required by Title V to demonstrate compliance with all Consent Decree requirements contained within Condition 1b (Consent Decree Emission Limits). At a minimum, the information in the reports shall include all information necessary to determine compliance during the reporting period with:
  - (1) All 30-day rolling average emission rates for NO<sub>x</sub>;
  - (2) The 30-day rolling average emission rate for SO<sub>2</sub>;
  - (3) The 24-hour rolling average emission rate for PM; and

Authority for Requirement: DNR Construction Permit 75-A-014-P12

#### **Continuous Monitoring Systems (CMS)**

A. The following monitoring systems are required:

#### 1) Opacity:

In accordance with 40 CFR §60.45(a), the owner or operator shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere except as provided under 40 CFR §60.45(b).

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

Per 40 CFR §60.45(b)(5), the owner or operator may petition the Administrator (in writing) to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.

#### 2) SO<sub>2</sub>:

In accordance with 40 CFR §60.45(a), the owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) and record the output of the system, for measuring sulfur dioxide (SO<sub>2</sub>) emissions, except as provided by 40 CFR §60.45(b).

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

This monitor shall also be used to demonstrate compliance with the non-NSPS emission standards in this permit.

#### 3) <u>NO<sub>x</sub>:</u>

In accordance with 40 CFR  $\S60.45(a)$ , the owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) and record the output of the system, for measuring nitrogen oxide (NO<sub>x</sub>) emissions, except as provided by 40 CFR  $\S60.45(b)$ .

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

This monitor shall also be used to demonstrate compliance with the non-NSPS emission standards in this permit.

#### 4) O<sub>2</sub> or CO<sub>2</sub>:

In accordance with 40 CFR  $\S60.45(a)$ , the owner or operator shall install, calibrate, maintain, and operate a CEMS and record the output of the system, for measuring the oxygen  $(O_2)$  or carbon dioxide  $(CO_2)$  content of the flue gases at each location where  $SO_2$  or  $NO_x$  emissions are monitored.

#### 5) <u>CO:</u>

Compliance with the carbon monoxide (CO) emission limits of this permit shall be continuously demonstrated by the owner or operator through the use of a CEMS. Therefore, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring CO emissions discharged to the atmosphere and record the output of the system.

The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 4A (PS4A) and Performance Specification 6 (PS6) requirements. The

specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a notice to the Department with the dates of the annual relative accuracy test audit.

#### 6) Flowmeter:

The owner or operator shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 6 and 40 CFR 60, Appendix F, Procedure 1. In addition, the owner or operator shall record the output of the system, for measuring the volumetric flow of exhaust gases discharged to the atmosphere or

Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20(c) and 40 CFR 75, Appendix A, and continuing to meet the applicable quality control and quality assurance requirements of 40 CFR §75.21 and 40 CFR 75, Appendix B, may be used.

#### 7) Particulate Matter:

As required by Consent Decree Paragraph 150, the owner or operator shall install, correlate, maintain, and operate a PM CEMS on the combined stack (EP 001). The following requirements shall apply:

- (a) As required by Consent Decree Paragraph 150, each PM CEMS shall:
  - (i) Comprise a continuous particle mass monitoring measuring filterable particulate matter concentration (directly or indirectly) on an hourly average basis and a diluent monitor used to convert the concentration to units expressed in lb/MMBTU.
  - (ii) Be appropriate for the anticipated stack conditions and capable of measuring filterable PM concentrations on an hourly average basis and the owner or operator shall maintain an electronic database that stores the hourly average emission values (in lb/MMBTU) of all PM CEMS data for at least five (5) years.
  - (iii) Operate at all times the unit it serves is operating except for periods of monitor malfunction, maintenance, or repair.
- (b) As required by Consent Decree Paragraph 153, the owner or operator shall:
  - (i) Use criteria set forth in 40 CFR 60, Appendix B, Performance Specification 11 (PS11) and 40 CFR 60, Appendix F, Procedure 2. The specifications of 40 CFR 60, Appendix F (QA/QC) shall apply.
  - (a) Conduct relative correlation audits no less frequently than once every three (3) calendar years or twelve (12) operating quarters, whichever comes first, or earlier if the characteristics of the PM or gas change such that the PM CEMS measurement technology is no longer valid.
- (c) As required by Consent Decree Paragraph 153, the owner or operator may use the correlation method specified in 40 CFR §63.10010(i) [at the temperature specified in 40 CFR Part 60, Appendix A-3] for purposes of correlating the PM CEMS

- under the Consent Decree. Diluent capping (i.e., 5% CO<sub>2</sub>) will be applied to the PM rate data for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.
- (d) As required by Consent Decree Paragraph 152, the owner or operator shall follow the Quality Assurance/Quality Control (QA/QC) protocol approved by EPA for each PM CEMS.
- (e) As required by Consent Decree Paragraph 154, the owner or operator shall:
  - (i) Ensure compliance with the PM CEMS installation and correlation plans submitted to and approved by EPA in accordance with Consent Decree Paragraphs 151 and 152.
  - (ii) Ensure performance specification tests on the PM CEMS are conducted.
  - (iii) Operate the PM CEMS in accordance with the approved plan and QA/QC protocol.
- (f) As required by Consent Decree Paragraph 148(c), the owner or operator shall conduct condensable PM testing each time a relative correlation audit is performed for the PM CEMS and stack sampling for filterable PM shall be performed pursuant to PS11. When PM stack tests are required, the owner or operator shall:
  - (i) Conduct the PM stack test using EPA Method 5 (filterable portion only) or any alternate method approved by EPA under the terms of the Consent Decree.
  - (ii) Conduct the condensable PM stack test using the reference methods and procedures set for in 40 CFR 51, Appendix M, Method 202.
  - (iii) Ensure:
    - Each stack test consists of three (3) separate runs performed under representative operating conditions not including SSM.
    - The sampling time for each run shall be at least sixty (60) minutes and the volume of each run shall be at least 0.85 dry standard cubic meters (30 dry standard cubic feet).
    - The PM emission rate from the stack test results is calculated in accordance with 40 CFR §60.8(f).
    - The results of each PM stack test is submitted to the appropriate regulatory agency (i.e. the Department or Linn County).
- B. The CEMS required in Condition 6.A. for SO<sub>2</sub>, NO<sub>x</sub>, and either O<sub>2</sub> or CO<sub>2</sub> shall be operated and the data recorded during all periods of operation including periods of startup, shutdown, malfunction or emergency conditions, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.
- C. As required by Consent Decree Paragraph 127, the following requirements apply to the SO<sub>2</sub> CEMS for the Consent Decree emission standards in this permit:
  - (1) The owner or operator shall use SO<sub>2</sub> emission data obtained from a CEMS in

- accordance with the procedures of 40 CFR Part 75 for all thirty (30) day rolling average emission rates and all twelve (12) month rolling average emission rates.
- (2) The SO<sub>2</sub> emissions data is not required to be bias adjusted and the missing data substituting procedures of 40 CFR Part 75 shall not apply.
- (3) Diluent capping (i.e., 5% CO<sub>2</sub>) shall be applied to the SO<sub>2</sub> emission rate for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.
- D. As required by Consent Decree Paragraph 103, the following requirements apply to the NO<sub>x</sub> CEMS for the Consent Decree emission standards in this permit:
  - (1) The owner or operator shall use NO<sub>x</sub> emission data obtained from a CEMS in accordance with the procedures of 40 CFR Part 75 for all thirty (30) day rolling average emission rates and all twelve (12) month rolling average emission rates.
  - (2) The NO<sub>x</sub> emissions data is not required to be bias adjusted and the missing data substituting procedures of 40 CFR Part 75 shall not apply.
  - (3) Diluent capping (i.e., 5% CO<sub>2</sub>) shall be applied to the NO<sub>x</sub> emission rate for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR Part 75, Appendix F, Section 3.3.4.1.
- E. The following data requirements shall apply to all CEMS for non-NSPS and non-Consent Decree SO<sub>2</sub>, NO<sub>x</sub>, and CO tons per rolling twelve (12) month emission standards in this permit:
  - (1) The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEM breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
  - (2) The 1-hour average SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least 2 data points must be used to calculate each 1-hour average.
  - (3) For each hour of missing emission data (NO<sub>x</sub>, SO<sub>2</sub>, or CO), the owner or operator shall substitute data by:
    - (a) For  $SO_2$ , and CO:
      - (i) If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
        - (a) For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

- (b) For a missing data period greater than 24 hours, substitute the greater of:
  - The 90<sup>th</sup> percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
  - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (ii) If the monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
  - (a) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
  - (b) For the missing data period of more than 8 hours, substitute the greater of:
    - The 95<sup>th</sup> percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
    - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
- (iii) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

#### (b) For NOx:

- (i) If the monitor data availability is equal to or greater than 95 percent, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for that hour of missing data period according to the following procedures:
  - (a) For a missing data period of less than or equal to 24 hours, substitute, as applicable, for each missing hour, the arithmetic average recorded by the monitoring system during the previous 2160 quality assured monitor operating hours at the corresponding unit load range or operational bin.
  - (b) For missing data period greater than 24 hours, substitute as applicable, for each missing hour, the greater of:
    - The 90<sup>th</sup> percentile hourly emission rate recorded by a monitoring system during the previous 2160 quality assured monitor operating hours at the corresponding unit load range or operational bin; or
    - The average of the recorded hourly emission rate recorded by a monitoring system for the hour before and the hour after the missing data period.
- (ii) If the monitor data availability is at least 90.0 percent but less than 95.0 percent, the owner or operator shall calculate substitute data by means of the

- automated data acquisition and handling system for that hour of missing data according to the following procedures:
- (a) For a missing data period of less than or equal to 8 hours, substitute, as applicable, the arithmetic average hourly emission rate recorded by a monitoring system during the previous 2160 quality-assured monitor operating hours at the corresponding unit load range or operational bin;
- (b) For a missing data period of greater than 8 hours, substitute, as applicable, for each missing hour, the greater of:
  - The 95<sup>th</sup> percentile hourly emission rate recorded by a monitoring system during the previous 2160 quality-assured monitor operating hours at the corresponding unit load range or operational bin; or
  - The average of the hourly emission rate recorded by a monitoring system the hour before and the hour after the missing data period.
- (iii) If the monitoring data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.
- F. The following procedure shall be used by the owner or operator to establish unit load ranges or operational bins for non-NSPS NO<sub>x</sub> emission limits:
  - (1) The owner or operator shall establish ten (10) operating load ranges defined in terms of percent of the maximum hourly average gross load of the unit [in gross megawatts (MW<sub>ge</sub>)] as shown in the table below (Do not use integrated hourly gross load in MW-hr):

Operating Load Range	Percent of maximum hourly gross load or maximum hourly gross steam load (%)		
1	0 - 10		
2	> 10 – 20		
3	> 20 – 30		
4	> 30 – 40		
5	> 40 – 50		
6	> 50 - 60		
7	> 60 – 70		
8	> 70 - 80		
9	> 80 – 90		
10	> 90		

(2) Beginning with the first hour of unit operation after the installation and certification of the NO<sub>x</sub> CEMS, for each hour of unit operation record a number one (1) through ten (10) that identifies the operating load range corresponding to the integrated hourly gross load of the emission unit recorded for each unit operating hour.

- (3) Beginning with the first hour of unit operation after the installation and certification of the NO<sub>x</sub> CEMS and continuing thereafter, the data acquisition and handling system must be capable of calculating and recording the following information for each unit operating hour of missing NO<sub>x</sub> data within each identified load range during the shorter of the previous 2,160 quality assured monitor operating hours (on a rolling basis) or all previous quality assured operating hours:
  - ➤ The average of the hourly NO<sub>x</sub> emission rates (in lb/MMBTU) reported by the NO<sub>x</sub> CEMS.
  - ➤ The 90<sup>th</sup> percentile value of hourly NO<sub>x</sub> emission rates (in lb/ MMBTU).
  - The 95<sup>th</sup> percentile value of hourly NO<sub>x</sub> emission rates (in lb/ MMBTU).
  - The maximum value of the hourly NO<sub>x</sub> emission rates (in lb/ MMBTU).
- (4) Calculate all NO<sub>x</sub> CEMS data averages, maximum values, and percentile values determined by this procedure using bias adjusted values in the load ranges.
- (5) When a bias adjustment is necessary for the NO<sub>x</sub> CEMS, apply the adjustment factor to all NO<sub>x</sub> CEMS data values placed in the load ranges.
- G. If requested by the Department, the facility shall coordinate the quarterly cylinder gas audits with the Department to allow the Department the opportunity to observe these audits. The relative accuracy test audits (RATA) shall be coordinated with the Department.

Authority for Requirement: DNR Construction Permit 75-A-014-P12

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 499

Stack Opening (inches, dia): 184 Exhaust Temperature (°F): 170 Exhaust Flowrate (scfm): 816,000 Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 75-A-014-P12

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the Monitoring requirements listed below.

#### **Compliance Demonstration(s)**

#### **Compliance Demonstration Table**

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – Federal	CEMS 1, 2, 3	Continuous	1 hour	40 CFR 60, Appendix A, Method 5
Opacity	COMS <sup>4</sup>	Continuous	1 hour	40 CFR 60, Appendix A, Method 9
$SO_2$	CEMS 1,5	Continuous	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>x</sub>	CEMS 1,5	Continuous	1 hour	40 CFR 60, Appendix A, Method 7E
CO	CEMS 1, 6	Continuous	1 hour	40 CFR 60, Appendix A, Method 10

<sup>&</sup>lt;sup>1</sup>CEMS = Continuous Emission Monitoring System

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🔀
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

Refer to Appendix A for the System-wide Consent Decree Requirements for IPL Facilities in Iowa.

<sup>&</sup>lt;sup>2</sup> As required by the Consent Decree, the owner or operator shall operate a PM CEMS and record the output of the system to demonstrate compliance with the Consent Decree limits. The PM CEMS data may be used to demonstrate compliance with other particulate matter emission limits.

<sup>&</sup>lt;sup>3</sup> See Condition 6.A.(7) of DNR Construction Permit 75-A-014-P12 for PM CEMS installation, operation, maintenance, QA/QC protocol, and all other PM CEMS monitoring requirements.

<sup>&</sup>lt;sup>4</sup>COMS = Continuous Opacity Monitoring System

<sup>&</sup>lt;sup>5</sup> See Condition 6 of DNR Construction Permit 75-A-014-P12 for continuous emission monitoring requirements for non-Consent Decree emission limits. See Condition 14.B.of DNR Construction Permit 75-A-014-P12 for continuous emission monitoring requirements for Consent Decree emission limits.

<sup>&</sup>lt;sup>6</sup> See Condition 6 of DNR Construction Permit 75-A-014-P12 for continuous emission monitoring requirements

#### **Emission Point ID Number: ASH2C**

#### Associated Equipment

Associated Emission Unit ID Numbers: LASH2 (Truck Silo), LASH2A (Storage Silo), and

LASH2B (Rail Silo)

Emissions Control Equipment ID Number: BAG1 Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: LASH2 Emission Unit Description: Unit #4 Ash Storage Silo

Raw Material/Fuel: Fly Ash Rated Capacity: 150 tons

Emission Unit vented through this Emission Point: LASH2A

Emission Unit Description: Unit #4 Ash Storage Silo

Raw Material/Fuel: Fly Ash Rated Capacity: 1,000 tons

Emission Unit vented through this Emission Point: LASH2B Emission Unit Description: Unit #4 Ash Storage Silo

Raw Material/Fuel: Fly Ash Rated Capacity: 100 tons

## **Applicable Requirements**

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limits: 40% (1)

(1) An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 95-A-846-S2

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) Emission Limits: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 95-A-846-S2

567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limits: 0.27 lb/hr

Authority for Requirement: DNR Construction Permit 95-A-846-S2

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 75

Stack Opening (inches):  $4 \times 10$ Exhaust Temperature (°F): 70 Exhaust Flowrate (acfm): 1,000

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 95-A-846-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

#### **Emission Point ID Number: 305**

#### **Associated Equipment**

Associated Emission Unit ID Numbers: 305

Emissions Control Equipment ID Number: BAG 305 Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 305 Emission Unit Description: Hydrated Lime Silo

Raw Material/Fuel: Hydrated Lime

Rated Capacity: 25 Tons/hr

## **Applicable Requirements**

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: No VE (1)

(1) No Visible Emissions shall be emitted from this emission point.

Authority for Requirement: DNR Construction Permit 13-A-228-S1

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM 2.5)

Emission Limits: 0.24 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-228-S1

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limits: 0.24 lb/hr

Authority for Requirement: DNR Construction Permit 13-A-228-S1

Pollutant: Particulate Matter (PM) Emission Limits: 0.24 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 13-A-228-S1

567 IAC 23.3(2)"a"

#### **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

#### **Operating Limits:**

Operating limits for this emission unit shall be:

A. The baghouse associated with this emission point shall be maintained and operated in accordance with the manufacturer's specifications.

#### Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall keep a log of all inspection and maintenance activities that are undertaken on the control equipment associated with this emission point. This log shall include, but not necessarily be limited to:
  - a. Date and time the activity took place;
  - b. Description of any issues identified during an inspection or addressed by maintenance activities;
  - c. Identification of staff members participating.

Authority for Requirement: DNR Construction Permit 13-A-228-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 105 Stack Opening (inches diameter): 16 Exhaust Temperature (°F): Ambient Exhaust Flowrate (scfm): 2,800 (1) Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 13-A-228-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

<sup>(1)</sup> Flow rate listed is based on two trucks pneumatically unloading hydrated lime simultaneously. If only one truck is pneumatically unloading hydrated lime, the flow rate would be approximately half the value listed. When no hydrated lime is being unloaded from trucks to the silo, no significant flow will be coming from this emission point.

Ν	Ιo	nito	ring	Reo	uirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

#### **Emission Point ID Number: ACS1**

#### **Associated Equipment**

Associated Emission Unit ID Numbers: ACS1

Emissions Control Equipment ID Number: BAG-ACS1 Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: ACS1 Emission Unit Description: Activated Carbon Silo

Raw Material/Fuel: Activated Carbon

Rated Capacity: 25 Tons/hr

## **Applicable Requirements**

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limits: 40% (1)

<sup>(1)</sup> An exceedence of the indicator opacity of "25%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 09-A-191

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 09-A-191

#### **Emission Point Characteristics**

Discharge Style: Downward

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 70 Stack Opening (inches diameter): 6 Exhaust Temperature (°F): Ambient Exhaust Flowrate (acfm): 650

Authority for Requirement: DNR Construction Permit 09-A-191

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

#### Emission Point ID Number: EP-LASH4A and EP-LASH4A-F

#### **Associated Equipment**

Associated Emission Unit ID Numbers: LASH4A & LASH4A-F

Emissions Control Equipment ID Number: BAG-LASH4A & CE-LASH4A-F Emissions Control Equipment Description: Baghouse & Water Spraying

Emission Unit vented through this Emission Point: LASH4A & LASH4A-F Emission Unit Description: Ash Silo 4 Filling & Ash Silo 4 Load Out

Raw Material/Fuel: Ash

Rated Capacity: 11.33 Tons/hr Each

## **Applicable Requirements**

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

#### **Emission Limits: Per Emission Point**

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in any permit contained in this "Collection of Air Permits". The following emission limits for *each* of the listed emission units shall not be exceeded:

EP ID	Pollutant	lb/hr	tons/yr	Other Limits	Reference/Basis
EP-LASH4A	Particulate Matter (PM) – State	NA	NA	0.1 gr/dscf	567 IAC 23.3(2)"a"(1)
(Silo Filling)	$PM_{10}$	1.24	NA	NA	09-A-190-S2 & 16-A-315
	Opacity	NA	NA	40% (1)	567 IAC 23.3(2)"d"
LASH4A-F (Pug Mill)	Particulate Matter (PM) – State	NA	NA	NA	567 IAC 23.3(2)"c" <sup>(2)</sup>

<sup>(1)</sup> An exceedance of the indicator opacity of "10%" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permits 09-A-190-S2 & 16-A-315

<sup>(2)</sup> The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property.

#### **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

#### **Operating Requirements and Associated Recordkeeping**

Unless specified by a federal regulation, all records as required by these permits shall be kept onsite for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping requirements for these permits shall be:

- A. The owner or operator shall inspect and maintain the baghouse (BAG-LASH4A) according to the facility's (Plant No. 03-03-001) operation and maintenance plan.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (BAG-LASH4A). This log shall include, but shall not limited to:
    - 1. The date that any inspection and/or maintenance was performed on the control equipment;
    - 2. Any issues identified during the inspection;
    - 3. Any issues addressed during the maintenance activities; and
    - 4. Identification of the staff member performing the maintenance or inspection.
- B. The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts from the Ash Silo 4 Load Out beyond the property line.

Authority for Requirement: DNR Construction Permits 09-A-190-S2 & 16-A-315

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

EP ID	Stack Height (feet, from the ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temperature (°F)	Exhaust Flowrate (scfm)
EP- LASH4A <sup>(1)</sup>	10	Horizontal	14	Ambient	4,825
LASH4A-F <sup>(2)</sup>	NA	NA	NA	Ambient	NA

<sup>(1)</sup> There are two vents associated with Ash Silo 4. Both vents are identical.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator

<sup>(2)</sup> There is no stack associated with the Ash Silo 4 Load Out.

shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Authority for Requirement: DNR Construction Permits 09-A-190-S2 & 16-A-315

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes ☐ No ⊠

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

#### **Emission Point ID Number: EP-LASH4B**

#### **Associated Equipment**

Associated Emission Unit ID Numbers: LASH4B

Emissions Control Equipment ID Number: BAG-LASH4B Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: LASH4B

Emission Unit Description: Ash Silo 4 (Telescoping Truck Filling Exhaust)

Raw Material/Fuel: Ash Rated Capacity: 11.33 Tons/hr

## **Applicable Requirements**

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limits: 40% (1)

(1) An exceedence of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 09-A-334

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limits: 0.31 lbs/hr

Authority for Requirement: DNR Construction Permit 09-A-334

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 09-A-334

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 25 Stack Opening (inches diameter): 10 Exhaust Temperature (°F): Ambient Exhaust Flowrate (acfm): 1,200 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 09-A-334

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🗵

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

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Authority for Requirement: 567 IAC 22.108(3)

#### **Emission Point ID Number: EP LASH4C**

#### <u>Associated Equipment</u>

Associated Emission Unit ID Numbers: LASH4C (Silo Vent) Emissions Control Equipment ID Number: BAG-LASH4C Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: LASH4C

Emission Unit Description: Ash Silo 4 (Silo Vent)

Raw Material/Fuel: Ash Rated Capacity: 11.33 Tons/hr

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limits: 40% (1)

<sup>(1)</sup> An exceedence of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 09-A-335

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limits: 0.44 lbs/hr

Authority for Requirement: DNR Construction Permit 09-A-335

Pollutant: Particulate Matter (PM)

Emission Limits: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 09-A-335

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## **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 133 Stack Opening (inches diameter): 12 Exhaust Temperature (°F): Ambient Exhaust Flowrate (acfm): 1,711 Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 09-A-335

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

## **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

## **Emission Point ID Number: BST5**

#### <u>Associated Equipment</u>

Associated Emission Unit ID Numbers: LB5

Emissions Control Equipment Description: Low NOx Burners

Emission Unit vented through this Emission Point: LB5

Emission Unit Description: Boiler

Raw Material/Fuel: #2 Fuel Oil or Propane

Rated Capacity: 32.7 MMBtu/hr

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% (1)

(1) An exceedence of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: 567 IAC 23.3(2)"d"

DNR Construction Permit 11-A-684-S2

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limits: 0.55 lbs/hr

Authority for Requirement: DNR Construction Permit 11-A-684-S2

Pollutant: Particulate Matter (PM) Emission Limit: 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

DNR Construction Permit 11-A-684-S2

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 215 ng/J <sup>(2)</sup>

(2) Emission limit equivalent to 0.50 lb/MMBtu. As an alternative, the facility may combust fuel with a sulfur content of no greater than 0.5% wt.

Authority for Requirement: 567 IAC 23.1(2)"Ill"

DNR Construction Permit 11-A-684-S2

## **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

## **NSPS and NESHAP Applicability**

This unit is subject to the requirements of the New Source Performance Standard (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc; 567 IAC 23.1(2)"Ill").

This unit is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial-Commercial-Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD).

#### **Operating Limits:**

Operating limits for this emission unit shall be:

- A. This unit shall be fired on #2 fuel oil or propane only.
- B. The sulfur content of any #2 fuel oil consumed in this unit shall not exceed 0.005% wt.
- C. The steam from this unit shall not be used to generate electricity for sale.
- D. The annual heat input to this unit shall not exceed 28645.2 million British Thermal Units (MMBtu) per twelve (12) month period, rolled monthly.\*

#### Reporting & Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. As required by 40 CFR 60.48c(g)(2) the owner or operator of this unit shall record the amount of each fuel combusted during each calendar month.
- B. For each shipment of #2 fuel oil received, a fuel supplier certification shall be obtained. As outlined in 40 CFR 60.48c(f) this certification shall contain the following:
  - i. The name of the oiler supplier;
  - ii. A statement from the oiler supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c;
  - iii. The sulfur content or maximum sulfur content of the oil.
- C. At the end of each month, calculate the total heat input to the unit over the over the previous month. This calculation shall use the amount of each type of fuel consumed as recorded in condition A above and the heat value of that fuel. (140,000 BTU/gallon for

<sup>\*</sup> A limit of 28645.2 MMBtu per year equals 876 hours per year limit

fuel oil #2; 91,500 BTU/gallon for propane)

D. At the end of each month, record the total heat input to this unit over the previous twelve (12) months.

Authority for Requirement: 40 CFR 60, Subpart Dc

567 IAC 23.1(2)"III"

DNR Construction Permit 11-A-684-S2

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 194 Stack Opening (inches diameter): 23.5 Exhaust Temperature (°F): 415

Exhaust Flowrate (scfm): 6,570

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-684-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🔀
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🔀
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

## **Emission Point ID Number: ASH2 (Fugitive)**

Associated Equipment
Associated Emission Unit ID Numbers: LASH2

Emission Unit vented through this Emission Point: LASH2 Emission Unit Description: Ash Silo Truck Unloader

Raw Material/Fuel: Ash Rated Capacity: 25 tons/hr

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for requirement: 567 IAC 23.3(2)"c"

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

## **Emission Point ID Number: ASH2B (Fugitive)**

Associated Equipment
Associated Emission Unit ID Numbers: LASH2B
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Emission Unit vented through this Emission Point: LASH2B

Emission Unit Description: Ash Silo Rail Unloader

Raw Material/Fuel: Ash Rated Capacity: 25 tons/hr

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for requirement: 567 IAC 23.3(2)"c"

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

## **Emission Point ID Number: ASH3 Associated Equipment** Associated Emission Unit ID Numbers: LASH3 Emission Unit vented through this Emission Point: LASH3 Emission Unit Description: Ash Pile Raw Material/Fuel: Fly ash Size: 6.0 Acres **Applicable Requirements** Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below. Pollutant: Fugitive Dust Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. Authority for requirement: 567 IAC 23.3(2)"c" **Monitoring Requirements** The owner/operator of this equipment shall comply with the monitoring requirements listed below. Yes No No **Agency Approved Operation & Maintenance Plan Required?** Yes No No Facility Maintained Operation & Maintenance Plan Required? Yes No No **Compliance Assurance Monitoring (CAM) Plan Required?**

## **Emission Point ID Number: DC1A (Internally Vented)**

## **Associated Equipment**

Associated Emission Unit ID: LDC1

Emissions Control Equipment ID Number: CE DC1A, CE DC1B, CE DC1C, and CE DC1D Emissions Control Equipment Description: Air Cleaners with Envelope Filters (4 identical units)

Emission Unit vented through this Emission Point: LDC1

Emission Unit Description: Dust Control System on Coal Handling

Raw Material/Fuel: Coal Rated Capacity: 650 Tons/hr

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40% (1)

Authority for Requirement: DNR Construction Permit 75-A-190-S2

567 IAC 23.3(2)"d"

Pollutant: Particulate Matter Emission Limits: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 75-A-190-S2

567 IAC 23.3(2)"a"

Pollutant: PM<sub>10</sub>

Emission Limits: 1.1 lb/hr

Authority for Requirement: DNR Construction Permit 75-A-190-S2

<sup>(1)</sup> An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

#### **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

## Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept onsite for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The permittee shall operate the four air cleaners with envelope filters in accordance with the recommendations of the manufacturer.
- B. The permittee shall maintain records on the maintenance work performed on the four air cleaners with envelope filters.

Authority for Requirement: DNR Construction Permit 75-A-190-S2

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): NA

Stack Opening (inches): NA Exhaust Temperature (°F): 70 Exhaust Flowrate (scfm): NA Discharge Style: Internally Vented

Authority for Requirement: DNR Construction Permit 75-A-190-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

## **Monitoring Requirements**

The owner/operator of this equipment shall comply with the Monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🗵
Compliance Assurance Monitoring (CAM) Plan Required?	Yes No No

## **Emission Point ID Number: DC2**

## Associated Equipment

Associated Emission Unit ID Number: LDC2 Emissions Control Equipment ID Number: BAG3

Emissions Control Equipment Description: Bag Filter (Model: Air Cure 484RF10)

Emission Unit vented through this Emission Point: LDC2

Emission Unit Description: Coal Bunker Room Dust Collecting System (\*)

Raw Material/Fuel: Coal Dust Collected Rated Capacity: 650 Tons Coal/hr

(\*) Construction permit 75-A-192-S4 identifies the units as Coal Bunker Rooms #1, 2, 3, & 4, Coal-Handling

Equipment in Transfer Tower #2, Tripper Conveyor 7, and Tripper Conveyor C.

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limits: 40% (1)

Authority for Requirement: DNR Construction Permit 75-A-192-S4

567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM<sub>10</sub>

Emission Limits: 2.50 lb/hr

Authority for Requirement: DNR Construction Permit 75-A-192-S4

Pollutant: Particulate Matter (PM) Emission Limits: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 75-A-192-S4

567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (PM)

Emission Limits: 9.96 lb/hr

Authority for Requirement: DNR Construction Permit 75-A-192-S4

#### **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

## **Operating Limits**

Operating limits for this emission unit shall be:

A. The permittee shall operate the fabric filter in accordance with the recommendations of the manufacturer.

Authority for Requirement: DNR Construction Permit 75-A-192-S4

## **Operating Condition Monitoring**

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The permittee shall maintain records on the maintenance work done on the fabric filter.

Authority for Requirement: DNR Construction Permit 75-A-192-S4

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 159

Stack Opening (inches, dia): 44 Exhaust Temperature (°F): 77 Exhaust Flowrate (scfm): 30,102

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 75-A-192-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

## **Monitoring Requirements**

The owner/operator of this equipment shall comply with the Monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?

Facility Maintained Operation & Maintenance Plan Required?

Yes □ No ☑

Compliance Assurance Monitoring (CAM) Plan Required?

Relevant requirements of CAM plan for this equipment: Particulate Matter

Authority for Requirement: 567 IAC 22.108(3)

## Compliance Assurance Monitoring (CAM) Plan for CE BAG3

## I. Background

#### A. Emissions Unit

Facility: IPL – Lansing Generating Station
Description: Bunker Rooms Dust Collecting System

Identification: LDC2

## B. Control Equipment

Description: Baghouse Identification: CE BAG3

#### C. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulations: 567 IAC 23.3(2)"a", (DNR Construction Permit 75-A-192-S4)

PM Emission Limit: 0.1 gr/dscf, 9.96 lb/hr

## II. Monitoring Approach

#### A. Indicator

Pressure drop across the baghouse is the indicator of the performance of the baghouse.

#### B. Indicator Range

Normal operating pressure drop range is between 1.0 and 10.0 inches of water. An excursion is triggered when the pressure drop across the baghouse is outside the normal operating range for a period of more than five (5) minutes.

#### C. Measurement Approach

Pressure drop shall be checked daily to ensure that the baghouse is operating inside the normal operating pressure drop range.

## D. QIP (Quality Improvement Plan) Threshold

The QIP threshold is triggered when total excursion time exceeds 5% of the operating time in a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

#### E. Performance Criteria

Data representativeness: Pressure drop of less than 1.0 or more than 10.0

inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status: Records of pressure drop readings will be

maintained for five years.

QA/QC practices and criteria: The facility shall check the pressure drop daily

when the baghouse is in operation. If a pressure drop of less than 1.0 or more than 10.0 inches of water for more than five (5) minutes is observed, corrective action will be taken within 8 hours.

Monitoring frequency and data

Collection procedure: Pressure drop readings shall be conducted daily

during a period when the baghouse is in operation. Records of the readings shall be maintained for

five years.

#### III. Regular Maintenance

In addition to monitoring the pressure drop, Lansing Generating Station will conduct the following activities to assure compliance. The following monitoring is not required during periods of time greater than one day in which the source does not operate.

## A. Continuous Monitoring and Corrective Actions

The baghouse has sensors and alarms to indicate problems that require maintenance. The equipment that is monitored by the control system includes:

- Hopper level
- Rotary valve (empties the hopper)
- Cleaning system drive mechanism
- Broken bag detector
- Pressure drop across bags
- Fire detection (temperature and CO)

If there is a problem with any of this equipment, an alarm is triggered. If the alarm is severe, the control system will shut the baghouse down and the baghouse cannot operate until the

problem is corrected and the alarm is cleared. Corrective actions will be taken to diagnose the problem and make repairs.

#### B. Weekly Monitoring and Corrective Actions

• Visible emissions from the exhaust vents shall be observed on a weekly basis to ensure that there are no visible emissions during the operation of the baghouse. If visible emissions are observed, corrective actions must be taken to reduce the emissions within 8 hours.

Corrective actions will be implemented upon the occurrence of an abnormal condition. The appropriate actions to correct the abnormal condition will be implemented within 8 hours.

## C. Record Keeping and Reporting

- Records of the corrective actions and maintenance activities will be kept for five (5) years
- Whenever an excursion is triggered, Lansing Generating Station will document the duration and cause (including unknown cause) of the excursion and the corrective actions taken.
- All excursions will be reported in semi-annual monitoring reports and annual compliance certifications.

#### D. Quality Control

- All instruments and equipment will be maintained and operated according to the manufacturer's recommendations.
- Appropriate spare parts are maintained as needed. Parts will be re-ordered as used.

## **Emission Point ID Number: EP-LEG1**

#### <u>Associated Equipment</u>

Associated Emission Unit ID Number: EU-LEG1

Emission Unit vented through this Emission Point: EU-LEG1

Emission Unit Description: Emergency Generator [Existing (Pre-June 12, 2006) Emergency

Generators, Compression Ignition, < 500 HP (and also <400 HP)] \*

Raw Material/Fuel: Diesel Fuel Rated Capacity: 311 Bhp

\* The engine listed is exempt from construction permitting since the rated capacity is less than 400 Bhp.

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO2) Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

#### **Operational Limits & Requirements**

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

#### **Operating Limits**

Operating limits for these emission units shall be:

1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

#### **Reporting & Recordkeeping**

Unless specified by a federal regulation, all records as required by this permit shall be kept onsite for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

#### **NSPS and NESHAP Applicability**

#### **NESHAP:**

This emergency engine is subject to 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

## Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

#### **Fuel Requirements**

No requirements except (beginning January 1, 2015) if you own or operate an existing emergency compression ignition stationary engine with a site rating of more than 100 Bhp and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 63.6604(b)

## Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

- 1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
- 2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
- 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- 4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and

- operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- 5. Install a non-resettable hour meter if one is not already installed.
- 6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

## Operating Limits 40 CFR 63.6640(f)

- 1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (up to) 50 hours per year is prohibited.
- 2. There is no time limit on the use of emergency stationary RICE in emergency situations.
- 3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
- 4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

## Recordkeeping Requirements 40 CFR 63.6655

- 1. Keep records of the maintenance conducted on the stationary RICE.
- 2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spend for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

## Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

- 3. An initial notification is not required per 40 CFR 63.6645(a)(5).
- 4. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)
- 5. If you own or operate an emergency stationary RICE with a site rating of more than 100 Bhp that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must submit an annual report. See 40 CFR 63.6650(h) for additional information.

Authority for Requirement: 40 CFR Part 63, Subpart ZZZZ 567 IAC 23.1(4)"cz"

## **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitor below.	oring requirements listed
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring (CAM) Plan Required?** 

Yes 🗌 No 🖂

## **Emission Point ID Number: Fugitive Sources**

## **Associated Equipment**

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity
CP1	LCP1	Coal Pile	Coal	7.35 Acres
CP2	LCP2	Coal Pile	Coal	5.17 Acres
CP3	LCP3	Coal Unloading	Coal	1,250 Tons/hr
CP4	LCP4	Coal Stockpiling	Coal	1,250 Tons/hr
CP5	LCP5	Coal Conveying	Coal	650 Tons/hr
CP6	LCP6	Coal Bulldozing	Coal	17,520 Bulldozer
CPO	LCPO	Coai Buildozilig	Coai	operating hours/yr

## **Applicable Requirements**

## Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for requirement: 567 IAC 23.3(2)"c"

#### **Monitoring Requirements**

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

#### IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

## **G1.** Duty to Comply

- 1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"
- 2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h"(3)
- 3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"
- 4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)
- 5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"
- 6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

## **G2. Permit Expiration**

- 1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 567 IAC 22.116(2)
- 2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

#### **G3.** Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry,

the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

## **G4.** Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

## **G5. Semi-Annual Monitoring Report**

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

#### **G6.** Annual Fee

- 1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
- 2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
- 3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
- 4. The fee shall be submitted annually by July 1 with forms specified by the department.
- 5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
- 6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
- 7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

## G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

- 1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b"

#### **G8.** Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e"

## **G9.** General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

- 1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
- 2. Remedy any cause of excess emissions in an expeditious manner.
- 3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
- 4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

## G10. Recordkeeping Requirements for Compliance Monitoring

- 1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
  - a. The date, place and time of sampling or measurements
  - b. The date the analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
  - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
- 2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance

records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
  - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

## G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

- 1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
  - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
  - b. Compliance test methods specified in 567 Chapter 25; or
  - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
- 2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a. Any monitoring or testing methods provided in these rules; or
  - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

# G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. 567 IAC 22.108(6)

#### G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

## G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing

emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
  - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and expected duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps being taken to remedy the excess emission.
  - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)
- 3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The facility at the time was being properly operated;
  - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
  - d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 567 IAC 22.108(16)

## **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). 567 IAC 22.108(5)"b"

## **G16.** Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3)

(emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. 567 IAC 23.1(2), 567 IAC 23.1(4)

## G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 22.144(455B));.
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 22.110(1)
- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 22.110(2)
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)

- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)
- 5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. 567 IAC 22.108(11)

## G18. Duty to Modify a Title V Permit

- 1. Administrative Amendment.
  - a. An administrative permit amendment is a permit revision that does any of the following:
    - i. Correct typographical errors
    - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source:
    - iii. Require more frequent monitoring or reporting by the permittee; or
    - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
  - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
  - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
- 2. Minor Title V Permit Modification.
  - a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
    - i. Do not violate any applicable requirement;
    - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
    - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
    - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
    - v. Are not modifications under any provision of Title I of the Act; and

- vi. Are not required to be processed as significant modification under rule 567 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
  - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.
- 3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

#### **G19. Duty to Obtain Construction Permits**

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

#### G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

## **G21. Open Burning**

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

## G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

## G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant

must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

## **G24. Permit Reopenings**

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a

remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

- d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
- e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)
- 4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)
- 5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

#### **G25. Permit Shield**

- 1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
  - a. Such applicable requirements are included and are specifically identified in the permit; or
  - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- 3. A permit shield shall not alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 22.108 (18)

## **G26.** Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

#### **G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

## **G28.** Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). 567 IAC 22.111(1)"d"

#### G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

## G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by

the department to determine whether such source is in compliance. Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau Wallace State Office Building 502 E 9<sup>th</sup> St.
Des Moines, IA 50319-0034 (515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

## G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

#### **G32.** Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits

U.S. EPA Region 7

Air Permits and Compliance Branch

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau

Iowa Department of Natural Resources

Wallace State Office Building

502 E 9<sup>th</sup> St.

Des Moines, IA 50319-0034

(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

#### Field Office 1

909 West Main – Suite 4 Manchester, IA 52057 (563) 927-2640

#### Field Office 3

1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177

#### Field Office 5

7900 Hickman Road, Suite #200 Windsor Heights, IA 50324 (515) 725-0268

#### **Polk County Public Works Dept.**

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351

#### Field Office 2

2300-15th St., SW Mason City, IA 50401 (641) 424-4073

#### Field Office 4

1401 Sunnyside Lane Atlantic, IA 50022 (712) 243-1934

#### Field Office 6

1023 West Madison Street Washington, IA 52353-1623 (319) 653-2135

## **Linn County Public Health**

Air Quality Branch 501 13th St., NW Cedar Rapids, IA 52405 (319) 892-6000

## V. Appendix A: System-wide Consent Decree Requirements for IPL Facilities in Iowa

Any requirements contained in this permit that are required by and refer to "Consent Decree" [United States of America and The State of Iowa, and The County of Linn, Iowa and Sierra Club v. Interstate Power and Light Company, Civil Action No.: C15-0061; United States District Court for the Northern District of Iowa (September 2, 2015)] have been included in this permit solely to comply with the Consent Decree.

If and when the Consent Decree is terminated, the substantive requirements originating in and required by the Consent Decree and included in this permit, shall remain in full force and effect. As required by Consent Decree Paragraph 225, the requirements and limitations enumerated in the Consent Decree are permanently included in this federally enforceable permit and shall remain applicable requirements as that term is defined in 40 CFR §70.2.

The requirements found in permit Conditions 14.A. – 14.E. were established upon the Interstate Power and Light (IPL) "system" in Iowa per the Consent Decree. "System" as used in this permit is defined as the Burlington, Dubuque, Lansing, M. L. Kapp, Ottumwa, Prairie Creek, Sixth Street, and Sutherland Generating Stations. The individual Generating Stations are defined by the Generating Station location and its units as listed in the following table:

D. P. A. G. G. A. G. G. A.	044 0444	
<b>Burlington Generating Station</b>	Ottumwa Generating Station	
Des Moines County	Wapello County	
• Unit 1 (212 MW, coal-fired)	• Unit 1 (726 MW, coal-fired)	
<b>Dubuque Generating Station</b>	Sutherland Generating Station <sup>1</sup>	
Dubuque County	Marshall County	
• Unit 1 (38 MW, fossil-fuel fired)	• Unit 1 (38 MW, fossil-fuel fired)	
• Unit 5 (29 MW, fossil-fuel fired)	• Unit 2 (38 MW, fossil-fuel fired)	
• Unit 6 (15 MW, fossil-fuel fired)	• Unit 3 (82 MW, fossil-fuel fired)	
Prairie Creek Generating Station	Sixth Street Generating Station <sup>2</sup>	
Linn County	Linn County	
• Boiler 1 (heat input of 245	• Unit 1 (10 MW, coal-fired)	
MMBTU/hr, coal-fired)	• Unit 2 (18 MW, coal-fired)	
<ul> <li>Boiler 2 (heat input of 304</li> </ul>	• Unit 3 (17 MW, coal-fired)	
MMBTU/hr, coal-fired)	• Unit 4 (17 MW, coal-fired)	
• Unit 3 (50 MW, coal-fired)	• Unit 5 (32 MW, coal-fired)	
• Unit 4 (149 MW, coal-fired)		
Lansing Generating Station <sup>3</sup>	Milton L. Kapp (M.L. Kapp)	
Allamakee County	Generating <sup>4</sup> Station	
• Unit 1 (15 MW, coal-fired)	Clinton County	
• Unit 2 (12 MW, coal-fired)	• Unit 1 (19 MW, coal-fired)	
• Unit 3 (38 MW, coal-fired)	• Unit 2 (219 MW, coal-fired)	
• Unit 4 (275 MW, coal-fired)		

## A. System-wide Emission Limits

(1) As required by Consent Decree Paragraph 102, the IPL "system" in Iowa shall not exceed the following annual tonnage limits for NO<sub>x</sub>:

Calendar Year	System-wide Annual NO <sub>x</sub> Limit (tons/yr)
2015, 2016, and 2017	11,500
2018 and 2019	10,500
2020	7,500
2021	7,250
2022 and continuing each calendar year thereafter	6,800

(2) As required by Consent Decree Paragraph 126, the IPL "system" in Iowa shall not exceed the following annual tonnage limits for SO<sub>2</sub>:

Calendar Year	System-wide Annual SO <sub>2</sub> Limit (tons/yr)
2015	39,000
2016	23,500
2017 and 2018	14,100
2019 and 2020	12,000
2021	11,000
2022, 2023, 2024, and 2025	6,000
2026 and continuing each calendar year thereafter	3,250

#### B. Consent Decree Monitoring

- (1) As required by Consent Decree Paragraphs 103 and 104, the owner or operator shall demonstrate compliance with the Consent Decree NO<sub>x</sub> limits using the following procedures:
  - (a) For system-wide annual tonnage limits and the Prairie Creek annual tonnage limits:
    - (i) For all listed units except for Prairie Creek Generating Station Units 1 and 2:

<sup>&</sup>lt;sup>1</sup> Sutherland Unit 2 no longer operates and has been removed from the Title V operating permit.

<sup>&</sup>lt;sup>2</sup> Sixth Street Generating Station no longer operates and its Title V permit has been rescinded.

<sup>&</sup>lt;sup>3</sup> Lansing Units 1, 2, and 3 no longer operate and the construction permit for each unit has been rescinded.

<sup>&</sup>lt;sup>4</sup> M.L. Kapp Unit 1 no longer operates and it has been removed from the Title V operating permit.

- As required by Consent Decree Paragraph 104, the owner or operator shall use NO<sub>x</sub> emission data obtained from a CEMS in accordance with the procedures specified in 40 CFR Part 75.
- (ii) For Prairie Creek Generating Station Units 1 and 2: As required by Consent Decree Paragraph 114, the owner or operator shall calculate calendar-year NO<sub>x</sub> mass emissions for inclusion in the system-wide annual tonnage limit [Condition 14.A.(1)] and the Prairie Creek annual tonnage limit by multiplying the NO<sub>x</sub> rate, as determined from the last performed reference method test, by the respective heat input for each unit for that calendar year. The heat input shall be calculated by multiplying the amount of each fuel combusted by its respective gross heating value and summed for all fuels combusted in each boiler.
- (2) Per Consent Decree Paragraphs 127 and 128, the owner or operator shall demonstrate compliance with the Consent Decree SO<sub>2</sub> limits using the following procedures:
  - (a) For system-wide annual tonnage limits the owner or operator shall use SO<sub>2</sub> emission data obtained from a CEMS in accordance with the procedures specified in 40 CFR Part 75. Once a unit is refueled the SO<sub>2</sub> emissions shall be calculated using a stack test emission factor or by using methods set forth in US EPA's AP-42 (Compilation of Air Pollutant Emission Factors).

#### C. Allowances

#### (1) NO<sub>x</sub> Allowances:

- (a) As required by Consent Decree Paragraph 43, "NO<sub>x</sub> Allowance" is defined as an authorization to emit a specific amount of NO<sub>x</sub> that is allocated or issued under an emission trading or marketable permit program of any kind established under the Clean Air Act (CAA) or applicable State Implementation Plan; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, a "NO<sub>x</sub> Allowance" shall include an allowance created and allocated under such program only for control periods starting on or after September 2, 2019 [the fourth anniversary of the date of entry of the Consent Decree].
- (b) As required by Consent Decree Paragraph 111, the owner or operator shall surrender or transfer to a non-profit third party selected by the owner or operator for surrender, all NO<sub>x</sub> allowances required to be surrendered pursuant to Consent Decree Paragraph 107 by June 30 of the immediately following calendar year. If any NO<sub>x</sub> allowances required to be surrendered are transferred directly to a non-profit third-party, the owner or operator shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of the Consent Decree. The report shall:
  - (i) Identify the non-profit recipient(s) of the NO<sub>x</sub> allowances and list the serial numbers of the transferred NO<sub>x</sub> allowances.
  - (ii) Include a certification by the third-party recipient(s) stating that the

- recipient(s) will not sell, trade, or otherwise exchange any of the  $NO_x$  allowances and will not use any of the  $NO_x$  allowances to meet any obligation imposed by any environmental law.
- (iii) No later than the third periodic report due after the transfer of any  $NO_x$  allowances, the owner or operator shall include a statement that the third-party recipient(s) surrendered the  $NO_x$  allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 112 of the Consent Decree within one (1) year after the owner or operator transferred the  $NO_x$  allowances to them. The owner or operator shall not have complied with the  $NO_x$  allowance surrender requirements of Consent Decree Paragraph 111 until all third-party recipient(s) have actually surrendered the transferred  $NO_x$  allowances to EPA.
- (c) As required by Consent Decree Paragraph 112, for all allowances required to be surrendered, the owner or operator shall ensure that a NO<sub>x</sub> allowance transfer request form is first submitted to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such NO<sub>x</sub> allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such NO<sub>x</sub> allowance transfer requests may be made in an electronic manner using the EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, the owner or operator shall ensure that the transfer of its NO<sub>x</sub> allowances are irrevocably authorized and that the source and location of the NO<sub>x</sub> allowances being surrendered are identified by name of account and any applicable serial or other identification numbers or station names.
- (d) As required by Consent Decree Paragraph 105, the owner or operator shall not use NO<sub>x</sub> allowances to comply with any requirement of the Consent Decree, including claiming compliance with any emission limitation required by the Consent Decree by using, tendering, or otherwise applying NO<sub>x</sub> allowances to offset any excess emissions.
- (e) As required by Consent Decree Paragraph 106, except as provided in Consent Decree Paragraphs 107 and 108, the owner or operator shall not sell, bank, trade, or transfer its interest in any NO<sub>x</sub> allowances allocated to units in the System.
- (f) As required by Consent Decree Paragraph 107, for each calendar year, the owner or operator shall surrender all NO<sub>x</sub> allowances allocated to the units in the System for that calendar year that the owner or operator does not need to meet federal and/or state CAA regulatory requirements for System units.
- (g) As required by Consent Decree Paragraph 108, the owner or operator is allowed to purchase or otherwise obtain NO<sub>x</sub> allowances from another source for purposes of complying with federal and/or state CAA regulatory requirements to the extent otherwise allowed by law.

(h) As required by Consent Decree Paragraph 109, the owner or operator's use and surrender of NO<sub>x</sub> Allowances are permanent and are not subject to any termination provision of the Consent Decree.

#### (2) NO<sub>x</sub> Super-Compliant Allowances

- (a) As required by Consent Decree Paragraph 110, notwithstanding Consent Decree Paragraphs 106 and 107, in each calendar year the owner or operator may sell, bank, use, trade, or transfer NO<sub>x</sub> allowances allocated to the units in the System that are made available in that calendar year solely as a result of:
  - (i) The installation and operation of any NO<sub>x</sub> air pollution control equipment that is not otherwise required under the Consent Decree and is not otherwise required by law;
  - (ii) The use of a selective catalytic reduction (SCR) prior to the date established in the Consent Decree; or
  - (iii) Achievement and maintenance of an emission rate below an applicable 30-day rolling average emission rate or 12-month rolling average emission rate for NO<sub>x</sub>;

provided the owner or operator is also in compliance for the calendar year with all emission limitations for  $NO_x$  set forth in the Consent Decree. The owner or operator shall timely report the generation of such Super-Compliant Allowances in accordance with Section XII (Periodic Reporting) of the Consent Decree.

#### (3) SO<sub>2</sub> Allowances:

- (a) As required by Consent Decree Paragraph 66, "SO<sub>2</sub> Allowance" is defined as an authorization to emit a specified amount of SO<sub>2</sub> that is allocated or issued under an emission trading or marketable permit program of any kind established under the CAA or applicable State Implementation Plan; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, a "SO<sub>2</sub> Allowance" shall include an allowance created and allocated under such program only for control periods starting on or after September 2, 2019 [the fourth anniversary of the date of entry of the Consent Decree].
- (b) As required by Consent Decree Paragraph 135, the owner or operator shall surrender or transfer to a non-profit third party selected by the owner or operator for surrender, all SO<sub>2</sub> allowances required to be surrendered pursuant to Consent Decree Paragraph 131 by June 30 of the immediately following calendar year. If any SO<sub>2</sub> allowances required to be surrendered are transferred directly to a non-profit third-party, the owner or operator shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of the Consent Decree. The report shall:
  - (i) Identify the non-profit recipient(s) of the SO<sub>2</sub> allowances and list the serial numbers of the transferred SO<sub>2</sub> allowances.
  - (ii) Include a certification by the third-party recipient(s) stating that the

- recipient(s) will not sell, trade, or otherwise exchange any of the  $SO_2$  allowances and will not use any of the  $SO_2$  allowances to meet any obligation imposed by any environmental law.
- (iii) No later than the third periodic report due after the transfer of any SO<sub>2</sub> allowances, the owner or operator shall include a statement that the third-party recipient(s) surrendered the SO<sub>2</sub> allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 136 of the Consent Decree within one (1) year after the owner or operator transferred the SO<sub>2</sub> allowances to them. The owner or operator shall not have complied with the SO<sub>2</sub> allowance surrender requirements of Consent Decree Paragraph 135 until all third-party recipient(s) have actually surrendered the transferred SO<sub>2</sub> allowances to EPA.
- (c) As required by Consent Decree Paragraph 136, for all allowances required to be surrendered, the owner or operator shall ensure that a SO<sub>2</sub> allowance transfer request form is first submitted to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO<sub>2</sub> allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such SO<sub>2</sub> allowance transfer requests may be made in an electronic manner using the EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, the owner or operator shall ensure that the transfer of its SO<sub>2</sub> allowances are irrevocably authorized and that the source and location of the SO<sub>2</sub> allowances being surrendered are identified by name of account and any applicable serial or other identification numbers or station names.
- (d) As required by Consent Decree Paragraph 129, the owner or operator shall not use SO<sub>2</sub> allowances to comply with any requirement of the Consent Decree, including claiming compliance with any emission limitation required by the Consent Decree by using, tendering, or otherwise applying SO<sub>2</sub> allowances to offset any excess emissions.
- (e) As required by Consent Decree Paragraph 130, except as provided in Consent Decree Paragraphs 131 and 132, the owner or operator shall not sell, bank, trade, or transfer its interest in any SO<sub>2</sub> allowances allocated to units in the System.
- (f) As required by Consent Decree Paragraph 131, for each calendar year, the owner or operator shall surrender all SO<sub>2</sub> allowances allocated to the units in the System for that calendar year that the owner or operator does not need to meet federal and/or state CAA regulatory requirements for System units.
- (g) As required by Consent Decree Paragraph 132, the owner or operator is allowed to purchase or otherwise obtain SO<sub>2</sub> allowances from another source for purposes of complying with federal and/or state CAA regulatory requirements to the extent otherwise allowed by law.

(h) As required by Consent Decree Paragraph 133, the owner or operator's use and surrender of SO<sub>2</sub> Allowances are permanent and are not subject to any termination provision of the Consent Decree.

# (4) SO<sub>2</sub> Super-Compliant Allowances

- (a) As required by Consent Decree Paragraph 134, notwithstanding Consent Decree Paragraphs 130 and 131, in each calendar year the owner or operator may sell, bank, use, trade, or transfer SO<sub>2</sub> allowances allocated to the units in the System that are made available in that calendar year solely as a result of:
  - (i) The installation and operation of any SO<sub>2</sub> air pollution control equipment that is not otherwise required under the Consent Decree and is not otherwise required by law;
  - (ii) The use of a dry flue gas desulfurization (DFGD) prior to the date established in the Consent Decree; or
  - (iii) Achievement and maintenance of an emission rate below an applicable 30-day rolling average emission rate or 12-month rolling average emission rate for SO<sub>2</sub>;

provided the owner or operator is also in compliance for the calendar year with all emission limitations for SO<sub>2</sub> set forth in the Consent Decree. The owner or operator shall timely report the generation of such Super-Compliant Allowances in accordance with Section XII (Periodic Reporting) of the Consent Decree.

### D. Repowering Requirements

- (1) As defined in Paragraph 61 of the Consent Decree, "Repower" or "Repowered" means the removal and replacement of the Unit components such that the replaced unit generates electricity solely through the combustion of natural gas through the use of a combined cycle combustion turbine technology. Nothing herein shall prevent the reuse of any equipment at any existing unit or new emissions unit, provided that the owner or operator applies for, and obtains, all required permits, including, if applicable, a Prevention of Significant Deterioration (PSD) or Nonattainment New Source Review (NSR) permit.
- (2) As defined in Paragraph 62 of the Consent Decree, "Retire," "Retired," or "Retirement" means to permanently shut down a unit such that the unit cannot physically or legally burn fossil fuel, and to comply with applicable state and federal requirements for permanently ceasing operation of the unit as a fossil fuel-fired electric generating unit, including removing the unit from Iowa's air emissions inventory, and amending all applicable permits so as to reflect the permanent shutdown status of such unit. The owner or operator can choose to not retire and to continue to operate such a unit only if is "Refueled" or "Repowered" within the meaning of the Consent Decree, and the owner or operator obtains any and all required CAA permits for the "Refueled" or "Repowered" unit, including but not limited to an appropriate permit pursuant to CAA Subchapter I, Parts C and D, and

pursuant to the applicable Iowa state implementation plan (SIP) provisions implementing CAA Subchapter I.

- (3) The owner or operator has ceased operations at Lansing Unit 1, Lansing Unit 2, Lansing Unit 3, M.L. Kapp Unit 1, Sutherland Unit 2, Sixth Street Unit 1, Sixth Street Unit 2, Sixth Street Unit 3, Sixth Street Unit 4, and Sixth Street Unit 5. In accordance with Paragraph 78 of the Consent Decree, the permanent "Retirement" of these units became an enforceable obligation such that the owner or operator may only operate if:
  - (i) It is "Repowered" per Condition 14.D.(1) and
  - (ii) The owner or operator obtains any and all required CAA permit(s) for the repowered unit including but not limited to an appropriate permit pursuant to CAA Subchapter I, Parts C and D, and pursuant to the applicable Iowa State Implementation Plan (SIP) provisions implementing CAA Subpart I.

### E. Post Consent Decree Reporting

As required by 567 IAC 25.1(6), the owner or operator shall provide quarterly reports to the Department no later than thirty (30) calendar days following the end of the calendar quarter on forms provided by the Department for each CEMS. All periods of recorded emissions in excess of applicable standards, the results of all calibrations and zero checks and performance evaluations or source upsets and any apparent reasons for these malfunctions and upsets shall be included in the report. In addition, the owner or operator shall include in the quarterly report all periods of monitor malfunction, maintenance, and/or repair procedures performed.

Upon the termination of the Consent Decree, the owner or operator shall submit periodic reports as required by Title V to demonstrate compliance with all Consent Decree requirements contained within Conditions 1 (Emission Limits), 5 (Operating Requirements with Associated Monitoring and Recordkeeping), and 14 (System-wide Consent Decree Requirements for IPL Facilities in Iowa) of this permit. At a minimum, the information in the reports shall include:

- (1) All information necessary to determine compliance during the reporting period with:
  - (a) All applicable system-wide annual tonnage limitations;
  - (b) The obligation to monitor SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions; and
  - (c) The obligation to surrender NO<sub>x</sub> and SO<sub>2</sub> allowances.

Emission reporting and allowance accounting information necessary to determine super-compliant  $NO_x$  and  $SO_2$  allowances that the owner or operator claims to have generated in accordance with Consent Decree Paragraphs 110 and 134 through control of emissions beyond the requirements of the Consent Decree.

# VI. Appendix B: Acid Rain Phase II Permit and CSAPR Requirements

# **Transport Rule (TR) Trading Program Title V Requirements**

### **Description of TR Monitoring Provisions**

The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the TR NO<sub>X</sub> Annual Trading Program, TR NO<sub>X</sub> Ozone Season Trading Program and TR SO<sub>2</sub> Group 1 Trading Program.

Unit ID: 4 (ORIS Code: 1047)					
Lansing Station, Interstate Light and Power					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO <sub>2</sub> monitoring) and 40 CFR part 75, subpart H (for NO <sub>X</sub> monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
$SO_2$	X				
$NO_X$	X				
Heat input	X				

- 1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NO<sub>X</sub> Annual Trading Program), 97.530 through 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program), and 97.630 through 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- 2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <a href="http://www.epa.gov/airmarkets/emissions/monitoringplans.html">http://www.epa.gov/airmarkets/emissions/monitoringplans.html</a>.

- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO<sub>X</sub> Annual Trading Program), 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.530 through 97.534 (TR NO<sub>X</sub> Ozone Season Trading Program) and/or 97.630 through 97.634 (TR SO<sub>2</sub> Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO<sub>X</sub> Annual Trading Program), 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program) and/or 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
- 5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.530 through 97.534 (TR NO<sub>X</sub> Ozone Season Trading Program) and 97.630 through 97.634 (TR SO<sub>2</sub> Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

### TR NO<sub>x</sub> Annual Trading Program requirements (40 CFR 97.406)

## (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

# (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO<sub>X</sub> Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO<sub>X</sub> Annual emissions limitation and assurance provisions under paragraph (c) below, provided that,

for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) NOx emissions requirements.

- (1) TR NO<sub>X</sub> Annual emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Annual units at the source.
  - (ii). If total NO<sub>X</sub> emissions during a control period in a given year from the TR NO<sub>X</sub> Annual units at a TR NO<sub>X</sub> Annual source are in excess of the TR NO<sub>X</sub> Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR NO<sub>X</sub> Annual unit at the source shall hold the TR NO<sub>X</sub> Annual allowances required for deduction under 40 CFR 97.424(d); and
    - (B). The owners and operators of the source and each TR NO<sub>X</sub> Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- (2) TR NO<sub>X</sub> Annual assurance provisions.
  - (i). If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>X</sub> Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying—(A) The quotient of the amount by which the common designated representative's share of such NO<sub>X</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>X</sub> emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO<sub>X</sub> emissions

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- from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO<sub>X</sub> Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO<sub>X</sub> emissions exceed the sum, for such control period, of the state NO<sub>X</sub> Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> Annual sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO<sub>X</sub> Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR NO<sub>X</sub> Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

#### (3) Compliance periods.

- (i). A TR NO<sub>X</sub> Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (ii). A TR NO<sub>X</sub> Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR NO<sub>X</sub> Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Annual allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR NO<sub>X</sub> Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>X</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- (6) Limited authorization. A TR NO<sub>X</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>X</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR  $NO_X$  Annual Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO<sub>X</sub> Annual allowance does not constitute a property right.

## (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Annual allowances in accordance with 40 CFR part 97, subpart AAAA.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

#### (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR  $NO_X$  Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>X</sub> Annual Trading Program.

(2) The designated representative of a TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall make all submissions required under the TR NO<sub>X</sub> Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

#### (f) Liability.

- (1) Any provision of the TR  $NO_X$  Annual Trading Program that applies to a TR  $NO_X$  Annual source or the designated representative of a TR  $NO_X$  Annual source shall also apply to the owners and operators of such source and of the TR  $NO_X$  Annual units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Annual Trading Program that applies to a TR NO<sub>X</sub> Annual unit or the designated representative of a TR NO<sub>X</sub> Annual unit shall also apply to the owners and operators of such unit.

# (g) Effect on other authorities.

No provision of the TR  $NO_X$  Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR  $NO_X$  Annual source or TR  $NO_X$  Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

### TR NOx Ozone Season Trading Program Requirements (40 CFR 97.506)

# (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

### (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO<sub>X</sub> Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO<sub>X</sub> Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

# (c) NO<sub>X</sub> emissions requirements.

- (1) TR NO<sub>X</sub> Ozone Season emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Ozone Season units at the source.
  - (ii). If total  $NO_X$  emissions during a control period in a given year from the TR  $NO_X$  Ozone Season units at a TR  $NO_X$  Ozone Season source are in excess of the TR  $NO_X$  Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season unit at the source shall hold the TR NO<sub>X</sub> Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
    - (B). The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.
- (2) TR NO<sub>X</sub> Ozone Season assurance provisions.
  - (i). If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>X</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such NO<sub>X</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>X</sub> emissions exceeds the respective common designated representative's assurance level; and
    - (B). The amount by which total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state for such control period exceed the state assurance level.
  - (ii). The owners and operators shall hold the TR  $NO_X$  Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a

- business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO<sub>X</sub> emissions exceed the sum, for such control period, of the State NO<sub>X</sub> Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>X</sub> emissions from the TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO<sub>X</sub> Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR NO<sub>X</sub> Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

### (3) Compliance periods.

- (i). A TR NO<sub>X</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (ii). A TR NO<sub>X</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR NO<sub>X</sub> Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR NO<sub>X</sub> Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO<sub>X</sub> Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.

- (6) Limited authorization. A TR NO<sub>X</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>X</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (i). Such authorization shall only be used in accordance with the TR  $NO_X$  Ozone Season Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO<sub>X</sub> Ozone Season allowance does not constitute a property right.

# (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

### (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO<sub>X</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO<sub>X</sub> Ozone Season Trading Program.
- (2) The designated representative of a TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall make all submissions required under the TR NO<sub>X</sub> Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official

submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

#### (f) Liability.

- (1) Any provision of the TR NO<sub>X</sub> Ozone Season Trading Program that applies to a TR NO<sub>X</sub> Ozone Season source or the designated representative of a TR NO<sub>X</sub> Ozone Season source shall also apply to the owners and operators of such source and of the TR NO<sub>X</sub> Ozone Season units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Ozone Season Trading Program that applies to a TR NO<sub>X</sub> Ozone Season unit or the designated representative of a TR NO<sub>X</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

### (g) Effect on other authorities.

No provision of the TR NO<sub>X</sub> Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>X</sub> Ozone Season source or TR NO<sub>X</sub> Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

### TR SO<sub>2</sub> Group 1 Trading Program requirements (40 CFR 97.606)

## (a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

# (b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO<sub>2</sub> Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO<sub>2</sub> Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

#### (c) SO<sub>2</sub> emissions requirements.

(1) TR SO<sub>2</sub> Group 1 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from all TR SO<sub>2</sub> Group 1 units at the source.
- (ii). If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
  - (A). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under 40 CFR 97.624(d); and
  - (B). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (2) TR SO<sub>2</sub> Group 1 assurance provisions.
  - (i). If total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO<sub>2</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such SO<sub>2</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and
    - (B). The amount by which total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state for such control period exceed the state assurance level.
  - (ii). The owners and operators shall hold the TR SO<sub>2</sub> Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

- (iii). Total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO<sub>2</sub> emissions exceed the sum, for such control period, of the state SO<sub>2</sub> Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO<sub>2</sub> emissions from the TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR SO<sub>2</sub> Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
  - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (B). Each TR SO<sub>2</sub> Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

### (3) Compliance periods.

- (i). A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (ii). A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
- (6) Limited authorization. A TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:

- (i). Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 1 Trading Program; and
- (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR SO<sub>2</sub> Group 1 allowance does not constitute a property right.

### (d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO<sub>2</sub> Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

### (e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO<sub>2</sub> Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
  - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO<sub>2</sub> Group 1 Trading Program.
- (2) The designated representative of a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall make all submissions required under the TR SO<sub>2</sub> Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

# (f) Liability.

- (1) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 source or the designated representative of a TR SO<sub>2</sub> Group 1 source shall also apply to the owners and operators of such source and of the TR SO<sub>2</sub> Group 1 units at the source.
- (2) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 unit or the designated representative of a TR SO<sub>2</sub> Group 1 unit shall also apply to the owners and operators of such unit.

### (g) Effect on other authorities.

No provision of the TR SO<sub>2</sub> Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO<sub>2</sub> Group 1 source or TR SO<sub>2</sub> Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

### Placeholder language to be inserted in the Title V for each affected unit

Cross-State Air Pollution Rule (CSAPR) (a.k.a., Transport Rule (TR))

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Annual, Nitrogen Oxides (NO<sub>x</sub>) Ozone Season, Sulfur Dioxide (SO<sub>2</sub>) Group 1

Emission Limits: Nitrogen Oxides and Sulfur Dioxide Allowances

Authority for Requirement: 40 CFR Part 97 (See appendix for requirements)